

Date: Friday, 12/9/2005 12:06:49 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WEARPAD
Job Number : 25197	
Estimate Number : 11358	
P.O. Number : <i>N/A</i>	Part Number : D334021
This Issue : 12/9/2005 S.O. No. : <i>N/A</i>	Drawing Number : D3340 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : 12/9/2005 Type : PURCHASED PARTS	Drawing Revision : B
Previous Run : <i>N/A</i>	Material : <i>N/A</i>
Written By : <i>See comment below</i>	Due Date : 12/30/2005
Checked & Approved By : <i>See comment below</i>	Qty: 10 Um: Each
Comment : Est: A 05.11.10 Preliminary issue AP/EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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**Comment:** PURCHASING

Issue P/O: *00000267* *05/12/12*
Email of ship DXF file to vendor
Laser Cut per Dwg D3340 flat pattern D3340-21
Material release note required

2.0	D334021F	Wearplate
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Comment: Qty.: 1.0000 U(s)/Unit Total: 10.0000 U(s)
Wearshoe

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
Ensure material release note is attached

DL 05/12/30 10

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK
Inspect dimensions

2.01.05 8 P40

5.0	BRAKE NC	NC BRAKE
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**Comment:** NC BRAKE


Deburr if necessary
Form on brake as per Dwg D3340 using Jigs DT and DT

JB 06/01/05 8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
06-01-05	4	Took 1 per template. Identify AS DT 8834	<i>[Signature]</i>	06-01-05	1	<i>[Signature]</i> 06-01-05	<i>[Signature]</i> 06-08-05

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ ☐ Date: 06/01/16
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-01-05	4	Detail 'C' holes were opened up during laser cut, laser burned open the side of the hole on 1 wearplate only ex: 	<i>[Signature]</i> 06-01-05	Scrap & destroy.	<i>[Signature]</i> 06-01-05	<i>[Signature]</i> 06-01-05	<i>[Signature]</i> 06-01-05	<i>[Signature]</i> 06-01-05

NOTE: Date & initial all entries

Date: Friday, 12/9/2005 12:06:49 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPAD

Job Number: 25197

Part Number: D334021

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



06-01-05

Comment: INSPECT WORK TO CURRENT STEP

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

FC 060112

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

06/01/13 (6) C2

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 71

06/01/13 (8)

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/01/13 (8)

Job Completion



06-01-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector



Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

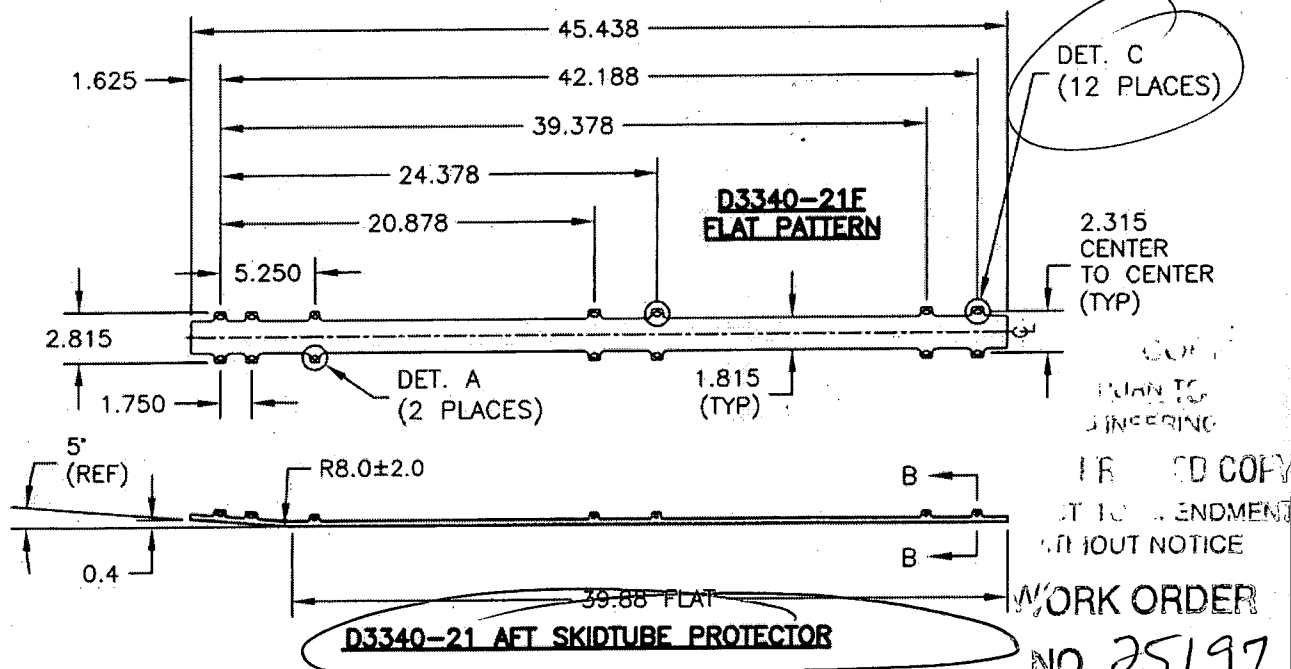
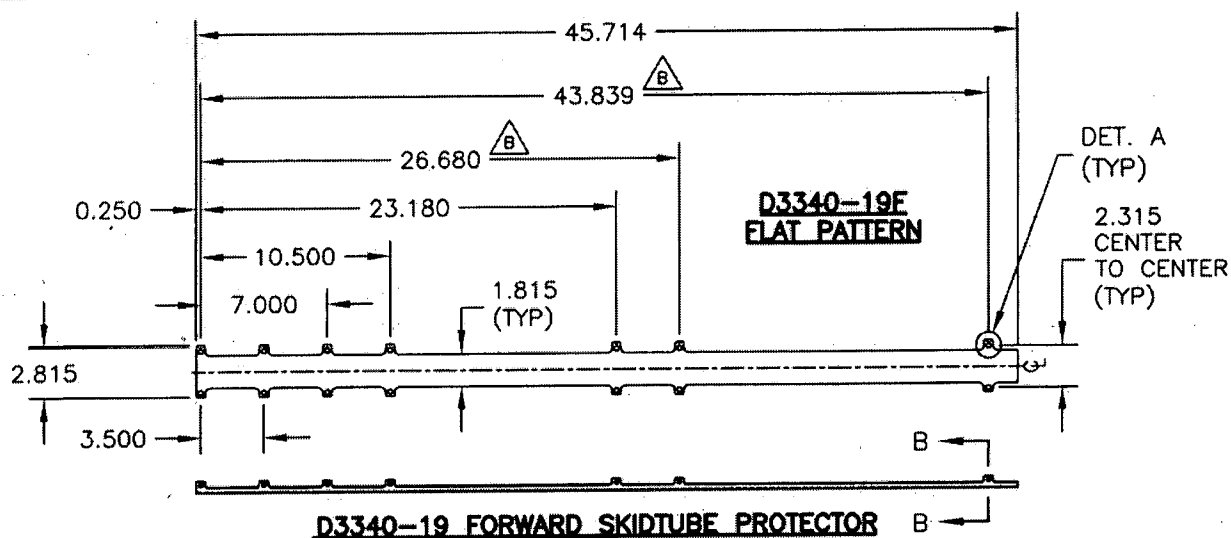
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3340	REV. B SHEET 8 OF 11
DATE 05.11.22		TITLE SKIDTUBE PROTECTOR	SCALE 1:10

**NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES COLD ROLLED STEEL 19 GAUGE (0.040 THICK)
- 2) PART IS SYMETRICAL ABOUT CENTER LINE
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP CORNERS 0.063 MAX.

RELEASED
05.11.28

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

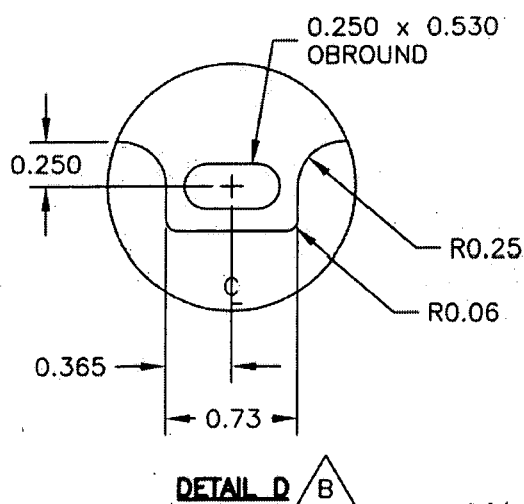
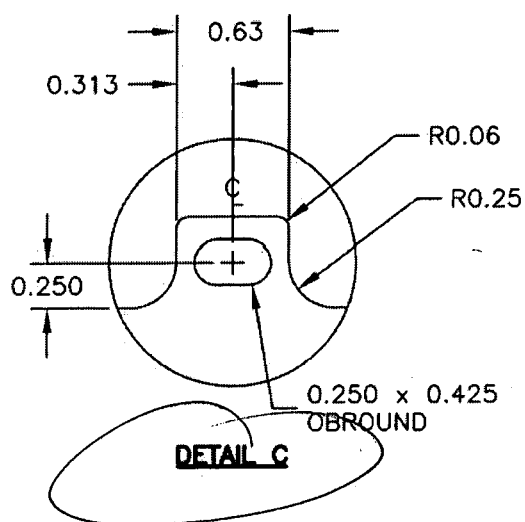
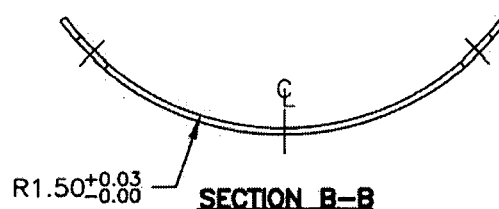
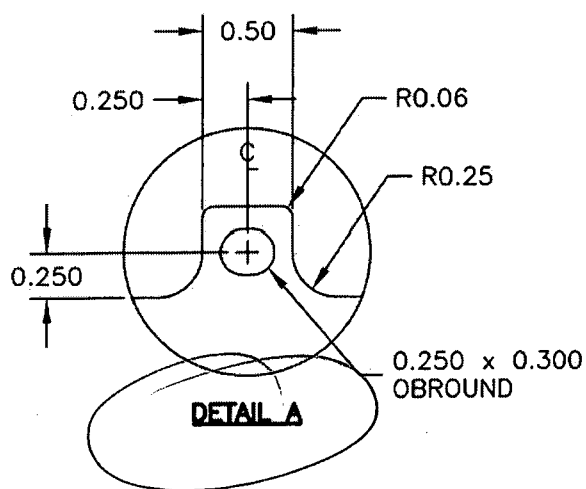
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3340	REV. B SHEET 11 OF 11
DATE 05.11.22		TITLE SKIDTUBE PROTECTOR	SCALE 1:1

RELEASED
25-11-28



201 /
NDMENT
NOTICE
WORK ORDER
NO. 25197

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INVOICE NO.
COMMODITY

SPECIFICATION:
CUSTOMER

YIEH MAU CORP.

FORM 465
PRIME COLD ROLLED STAINLESS STEEL SHEET AISI 304/304 L
FINISH WITH 100 MIC. FILM ON MAIN SIDE, WITH BACK-PASS,
SLITTED EDGE AISI 304/304 L FINISH WITH PAPER INTERLEAVED,
SLITTED EDGE.
AISI 304

INTEGRIS METALS LTD

INSPECTION CERTIFICATE

MATERIAL TEST/INSPECTION CERTIFICATES

工廠: 嘉里基路竹園路安路345號
345, SHUN AN RD. LU CHU HSIANG
KAOHSIUNG TAIWAN R.O.C.
TEL: (07) 872385 FAX: (07) 8723008
CERTIFICATE NO: 0011182
DATE OF ISSUE: 11/02/2004

SPECIFICATION :		CUSTOMER :		AISI 304		INTEGRIS METALS LTD		Physical Properties					Chemical Composition													
(ITEM NO) SIZE	NO.	Weight (N.W.)		Heat No.	ID NO.	Tensile Test GL-50mm					Tensile Test GL-50mm								Chemical Composition (%)							
		KGS	LBS			Y.S. (N/mm ²)	T.S. (N/mm ²)	E.L. (%)	HRB	HV	C x100	SI x100	Mn x100	P x100	S x100	NE x100	Cr x100	N x100								
AISI 304 2B (7425-4228)	1	1,465	3,230	YU231320	3AS44453B-21	258	685	56	81	168	4.8	51	119	24	2	804	1821	2.7								
24GA/48"X120"	1	1,464	3,228	YU231320	3AS44453B-22	258	685	56	81	168	4.8	51	119	24	2	804	1821	2.7								
24GA/48"X120"	1	1,464	3,228	YU230510	38637600B-51	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4								
22GA/48"X96"	1	1,464	3,228	YU230510	38637600B-52	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4								
22GA/48"X120"	1	1,375	3,031	YU230510	38637600B-52	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4								
22GA/48"X120"	1	1,445	3,186	YU134975	3AS43434A-1	312	666	51	82	161	4.1	49	112	24	2	809	1821	2.8								
18GA/48"X96"	1	1,437	3,200	YU231066	3AS42732-4	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7								
18GA/48"X96"	1	1,453	3,203	YU231066	3AS42732-5	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7								
18GA/48"X120"	1	1,455	3,208	YU231066	3AS42732-6	301	664	49	84	166	3.7	40	116	27	5	810	1824	3.7								
18GA/48"X120"	1	1,423	3,137	YU231143	3AS42686A-6	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7								
16GA/48"X120"	1	1,424	3,139	YU231143	3AS42686A-7	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7								
16GA/48"X120"	1	1,420	3,131	YU231143	3AS42686B-1	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7								
16GA/48"X120"	1	1,441	3,177	YU231075	3AS42917A-1	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4								
16GA/48"X96"	1	1,441	3,177	YU231075	3AS42917A-2	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4								
16GA/48"X96"	1	1,420	3,131	YU231075	3AS42917A-3	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4								
14GA/48"X120"	1	1,420	3,131	YU231075	3AS42917A-4	302	650	52	83	162	4.2	48	119	28	6	806	1813	3.4								
14GA/48"X120"	1	1,446	3,188	YU135202	3AS45623A-211	301	641	53	81	157	5.1	51	114	30	9	806	1822	3								
14GA/60"X96"	1	1,405	3,097	YU135202	3AS45623A-213	301	641	53	81	157	5.1	51	114	30	9	806	1822	3								
14GA/60"X120"	1	1,540	3,395	YU135202	3AS45623A-214	301	641	53	81	157	5.1	51	114	30	9	806	1822	3								
14GA/60"X120"	1	1,540	3,395	YU135202	3AS45623A-214	301	641	53	81	157	5.1	51	114	30	9	806	1822	3								

NO MERCURY CONTAMINATION
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS
BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE.

Good test good for all Heat NO.

PRODUCT IN ACCORDANCE WITH ASTM A240, A480,
A362R, ASME SA240, Q3760D.

YIEH MAU CORP.

Lin Kuo Hsin
Manager of Quality Assurance

2094

304

0455

(0.037)

po # 267 196



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8999 / 375 8111 Auckland
(09) 235 8089 / 235 3535 Waiuku
Fax: (09) 375 8999

TEST CERTIFICATE

Ref: 5379/23650

CUSTOMER	Wilkinson	P5C5C5-DI002	SPECIFICATION	ASTMA1008 CS Type A	Revised 22/8/2005																				
CUSTOMER O/N	90-21N-742		PRODUCT	CRA WIDE COIL	CERTIFICATE No TC116858																				
MILL O/N	486968		DIMENSIONS	0.033" x 48" x Coil	PAGE 1 of 1																				
					DATE 19 August 2005																				
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT										MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)													
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH	
			x100								x1000						x10000	x100	180°			G.L.=	HRB	()	(feet)
R9-466080-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				50		2700	
R9-466081-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				50		2700	
R9-466082-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	
R9-466083-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=r0 (C)=r45	(A)=10mm x 10mm (D)=2.5mm x 10mm (E)=5mm x 10mm	(A)=C+Mn/6 (B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65 S ₀ (F)=8"	(B)=r90 (D)=(r0+r90+2r45)/4		(C)=C+Mn/6+Si/24 (D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED

Satish Misra
QC METALLURGIST

2094ms

POH 267, 146



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8996 / 375 8111 Auckland
(09) 235 8089 / 235 3535 Waiuku
Fax: (09) 375 8859

TEST CERTIFICATE

Ref: S210/22495

CUSTOMER	Wilkinson	P50323 DI001										SPECIFICATION										ASTMA1008 CS Type A										CERTIFICATE No										TC112397									
CUSTOMER O/N	90-21N-686										PRODUCT										CRA WIDE COIL										PAGE										1 of 1										
MILL O/N	480737										DIMENSIONS										0.055" x 48" x Coil										DATE										09 June 2005										
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT																		MECHANICAL TESTS (TEST SPECIFICATION -										ASTMA370																					
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH																											
		x100				x1000														x10000		x100		180°				G.L.=	HRB	()	(feet)																				
R9-459713-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1585																											
R9-459714-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1457																											
R9-459715-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1375																											
R9-459716-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1473																											
R9-459717-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1631																											
R9-459718-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1093																											
R9-459719-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1562																											
R9-459720-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1535																											
R9-460380-00	641761	4	TR	20	13	17	12	18	25	5	8	1	1					Good				50		1581																											
R9-460381-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1562																											
R9-460382-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1503																											
R9-461458-00	642309	2	TR	18	10	20	11	17	19	1	6	1	1					Good				48		1785																											

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=0 (C)=r45	(C)=5mm x 5mm	(A)=C+Mn/8
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65? So (F)=8"	(B)=r90 (D)=(r0+r90+2r45)/4	(D)=10mm x 10mm	(B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15
			(E)=7.5mm x 10mm	(C)=C+Mn/6+Si/24
				(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Batish Misra*
QC METALLURGIST

16 ga ms

POA 146, 267, 245,